Keynote Address

SPAWAR Industry Conference

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Statement A: Approved for Public Release;
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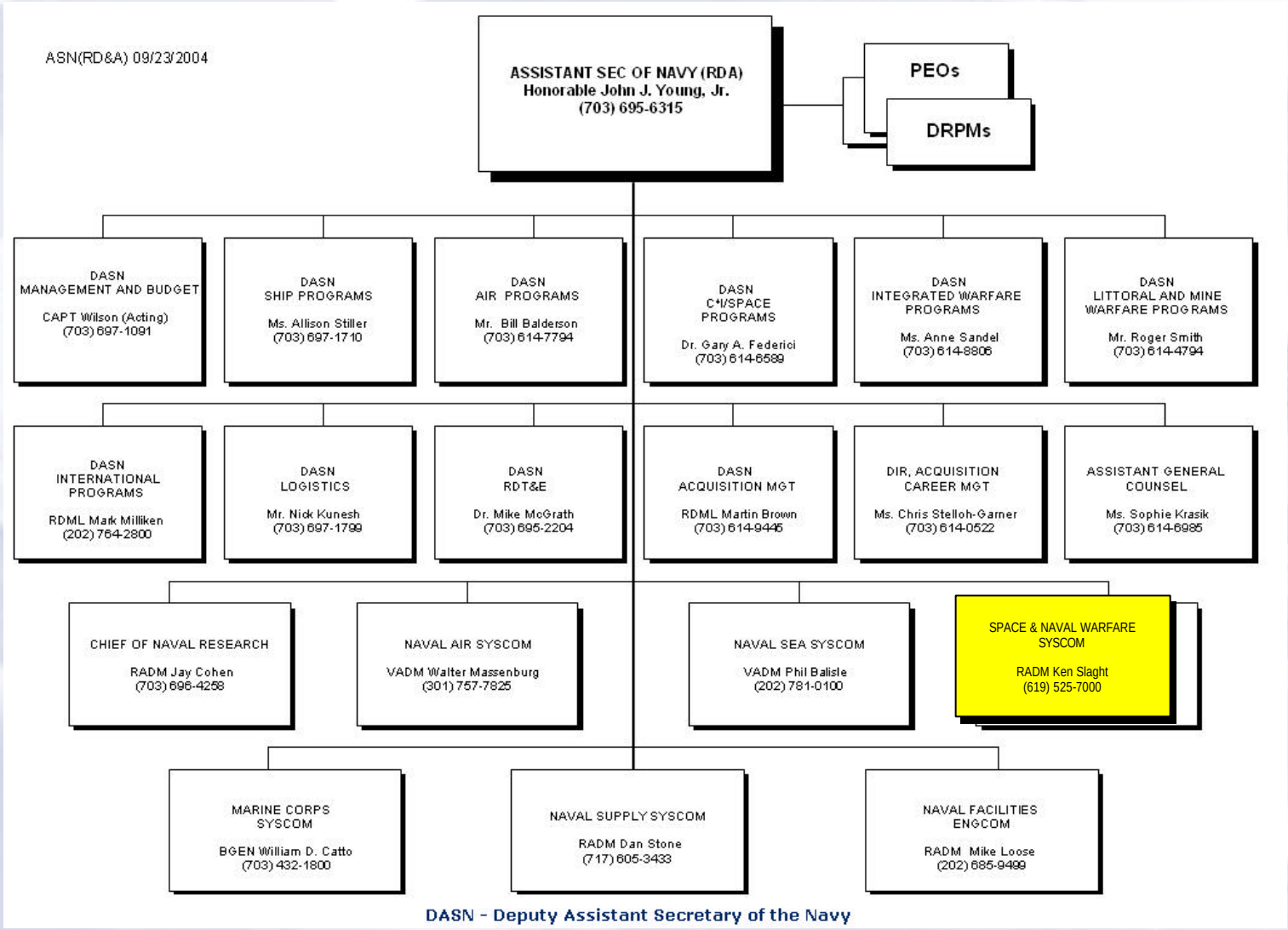
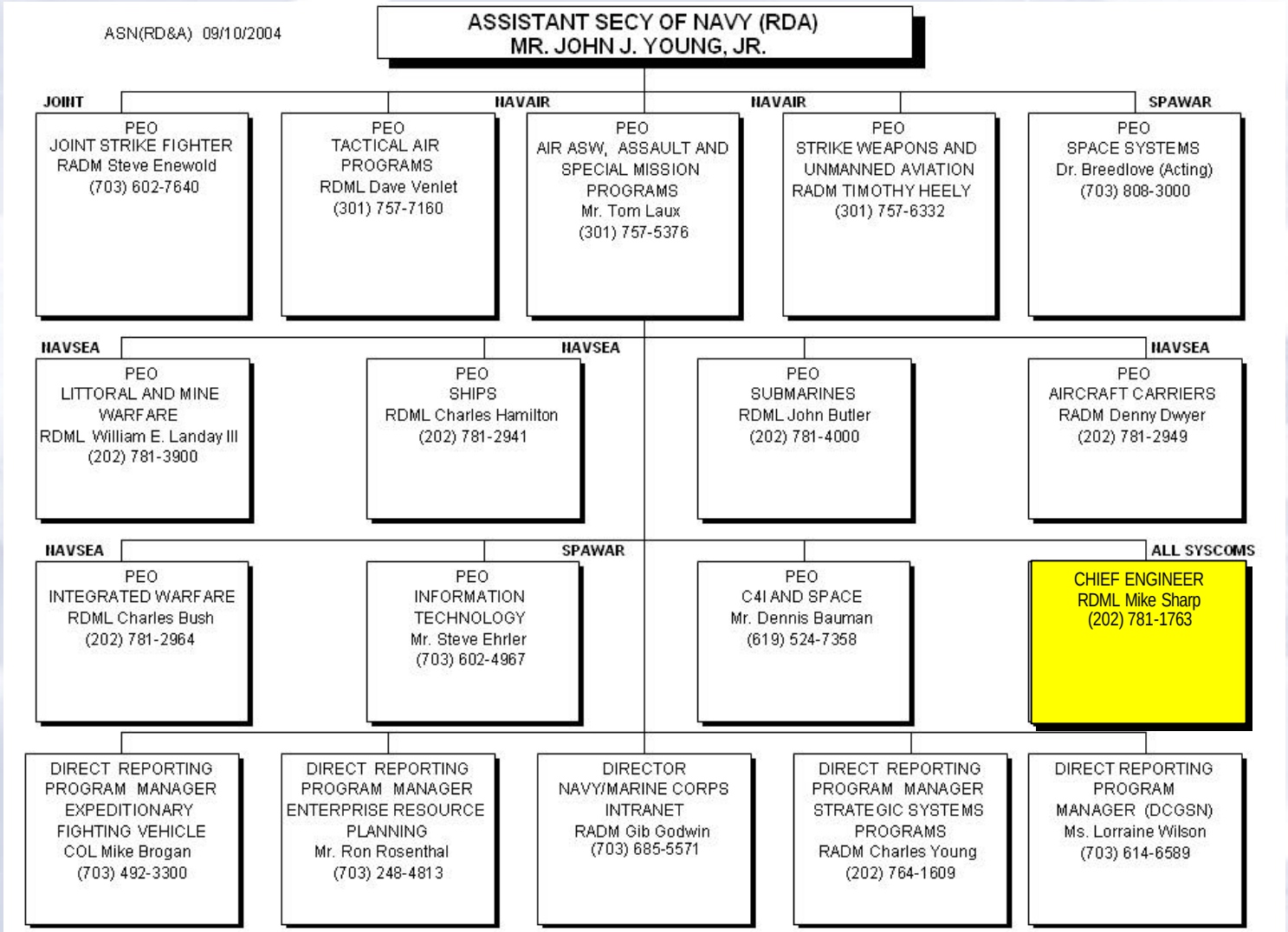
DASN Structure



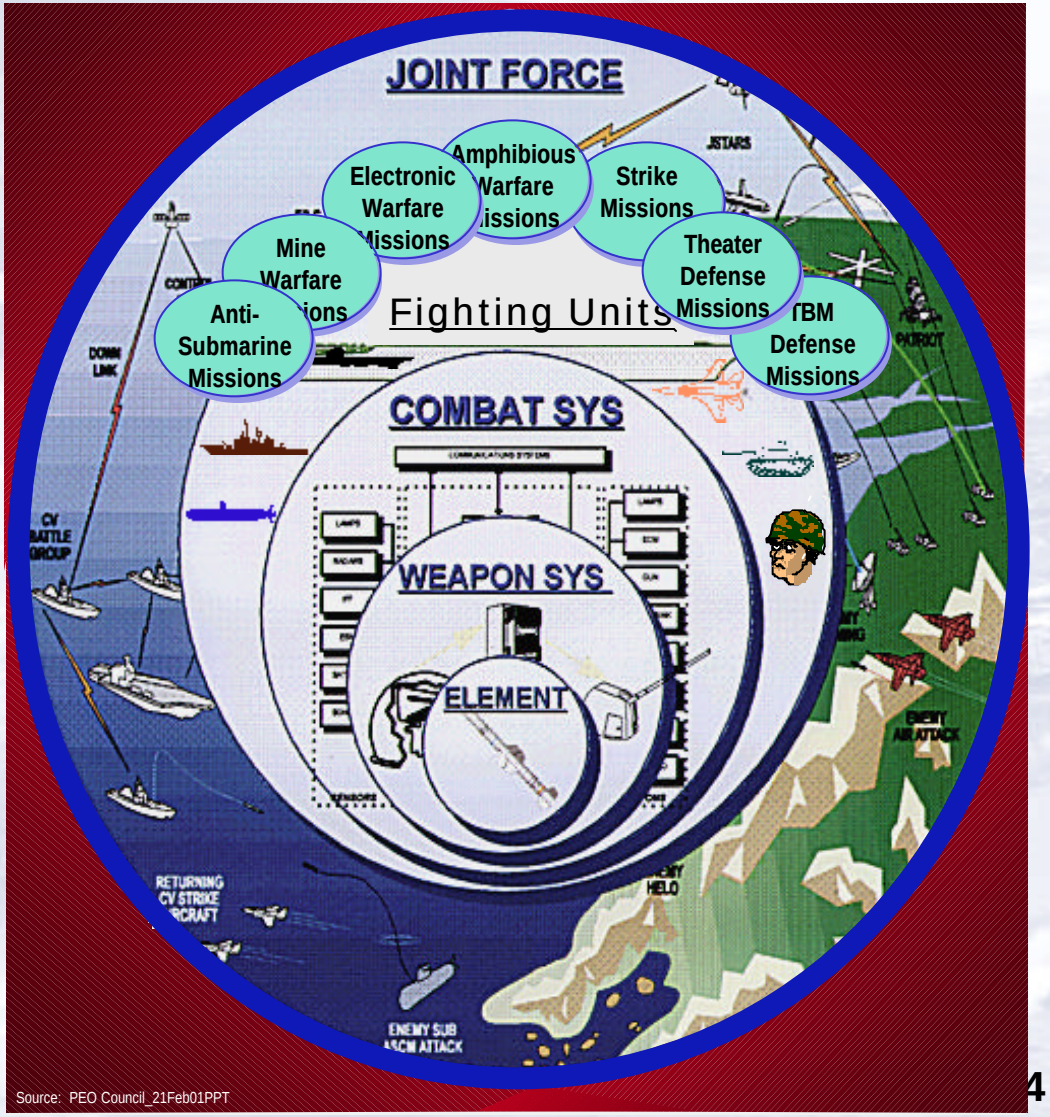
PEO / DRPM Structure



The Objective

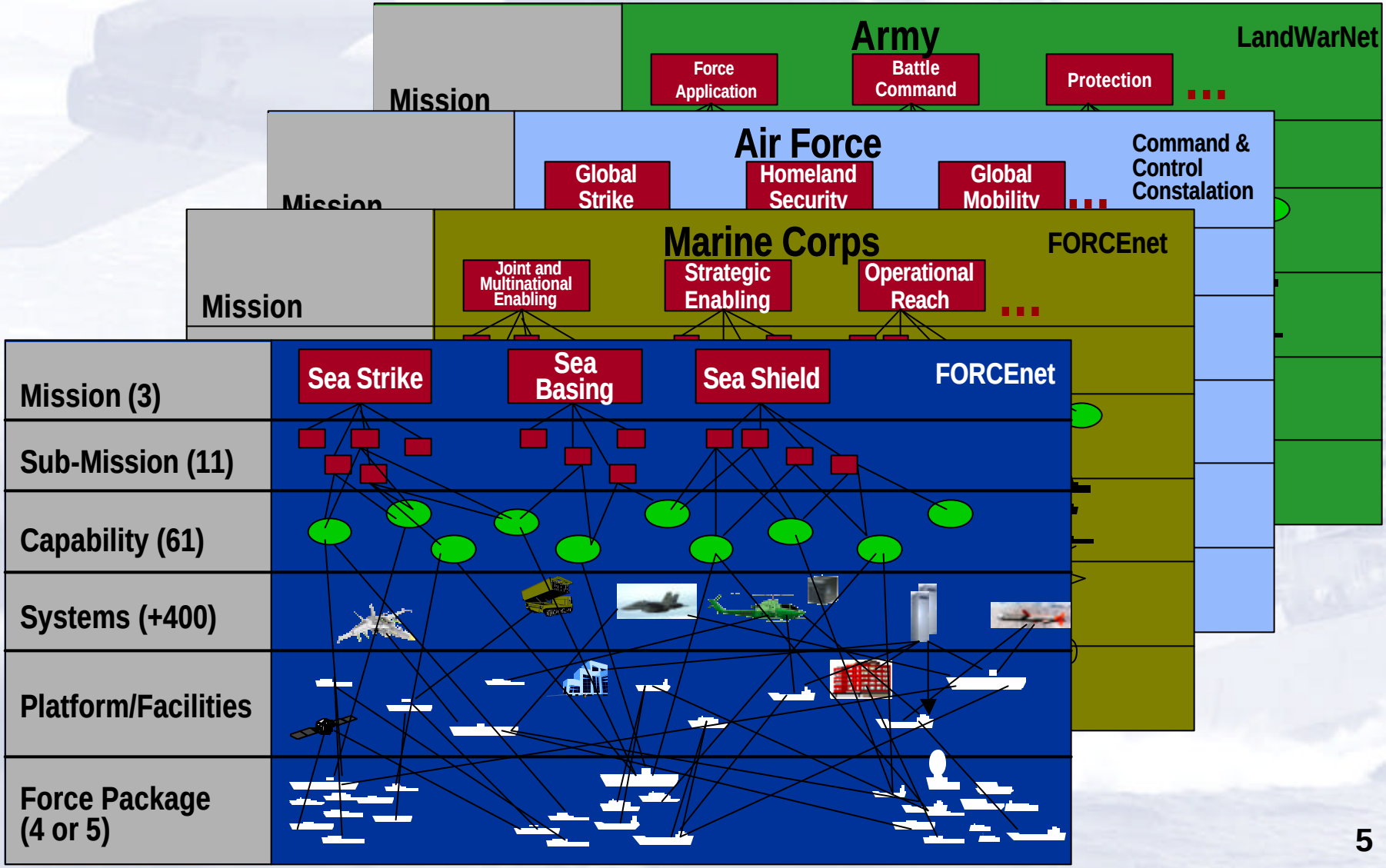
System Engineering & Management...

At Joint Force Level



Source: PEO Council_21Feb01PPT

Joint Interoperability Challenge

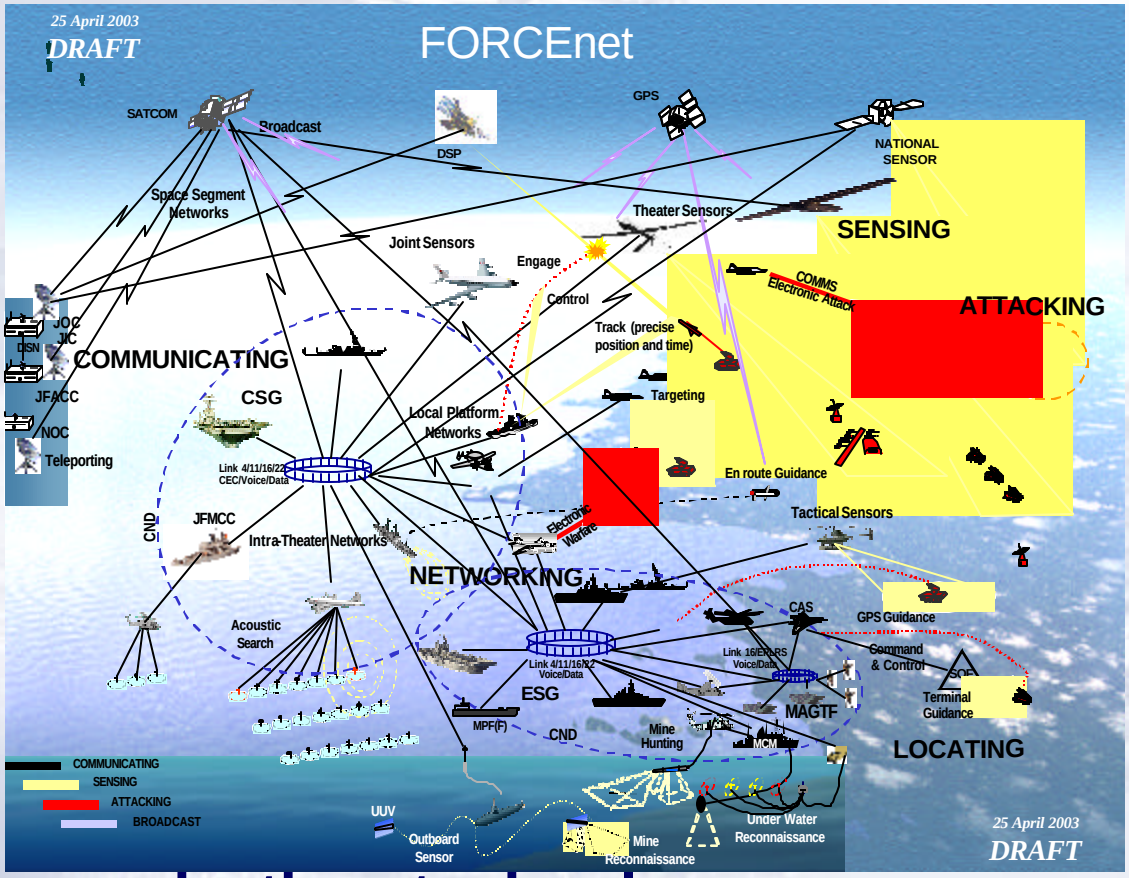


Agenda

- Fundamental Elements
- Structured for today & tomorrow
- The course ahead

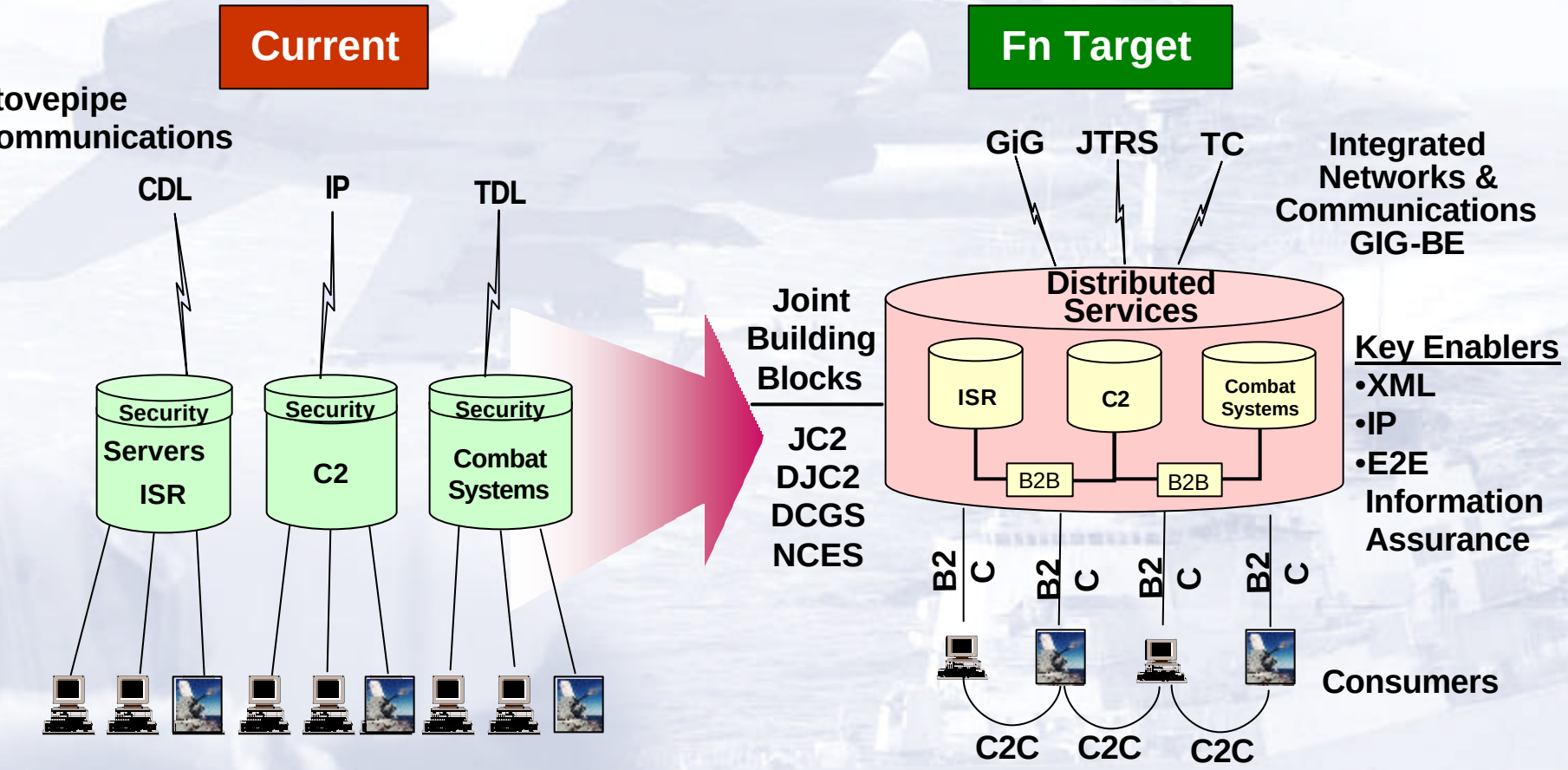
What is FORCEnet?

- **Architectural Framework**
  - **Aligns and integrates into a single network**
    - **Warriors**
    - **Sensors**
    - **Command & Control**
    - **Platforms**
    - **Weapons**
- **Globally networked, distributed combat force**
- **Scalable**



- **Transforms doctrine, organization, technology, leadership, personnel, facilities, e.g. warfighting capability into globally networked distributed combat force.**

Push to a Common Environment

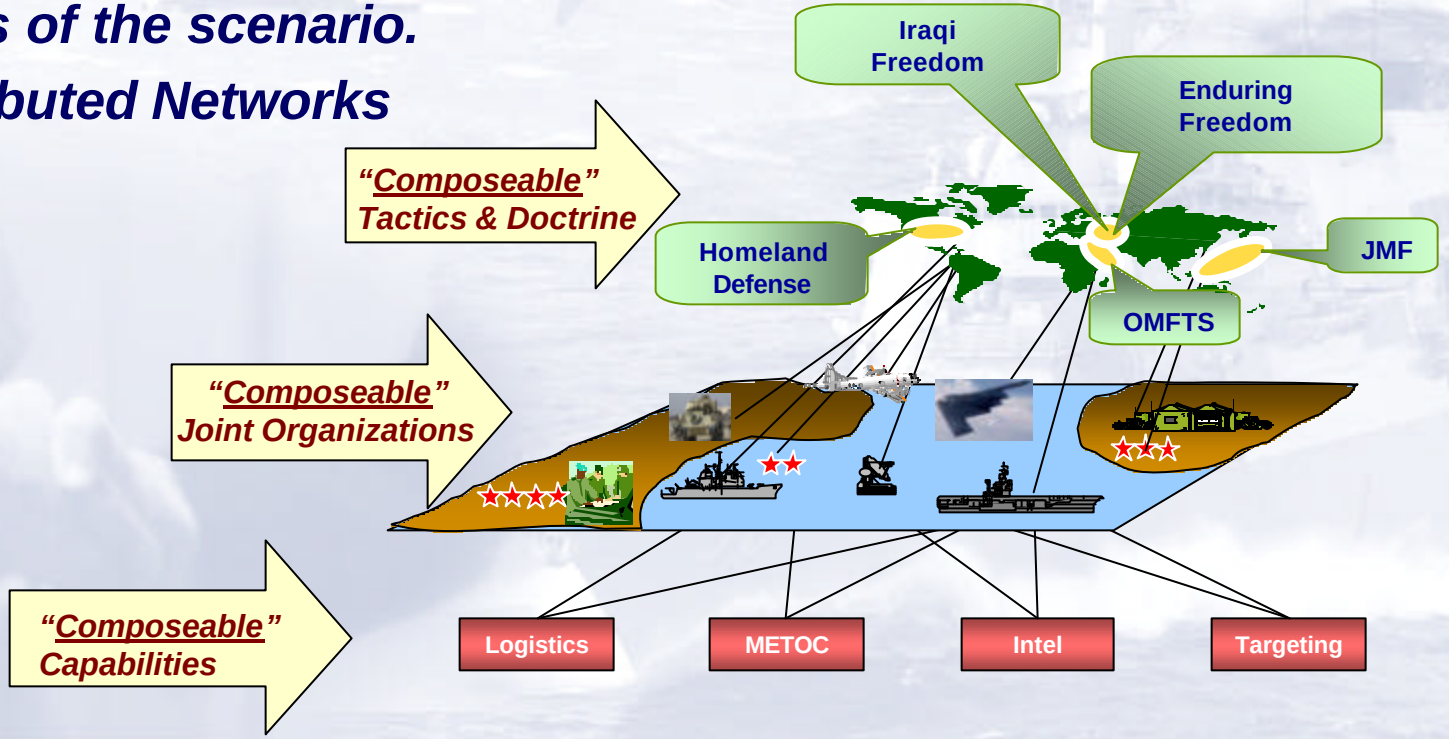


B2B = Business to Business
B2C = Business to Consumer
C2C = Consumer to Consumer
(Enabling Publish/Subscribe Solutions)

FORCEnet Elements

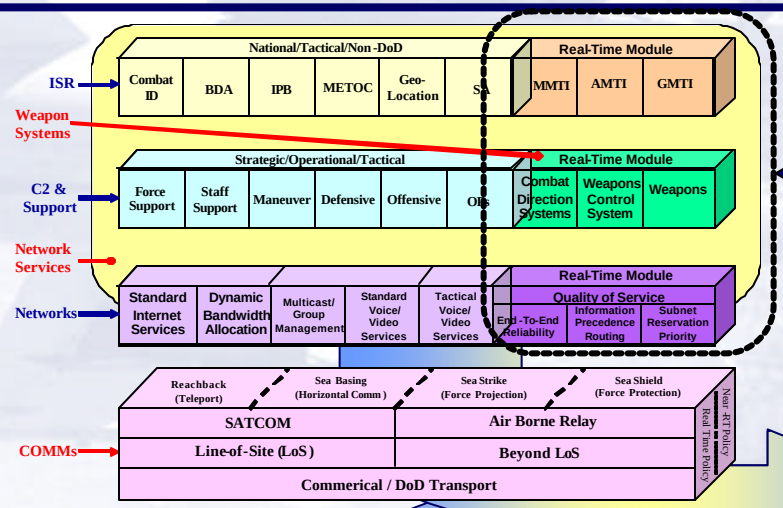
- *"Composeability" -- The ability to select "on the fly" from a vast network, the specific information resources which are best suited to solving a particular problem or providing specific information.*

- *"On the fly" -- Sources will change with the information needs of the scenario.*
- *Distributed Networks*



FORCEnet – Open Architecture Convergence

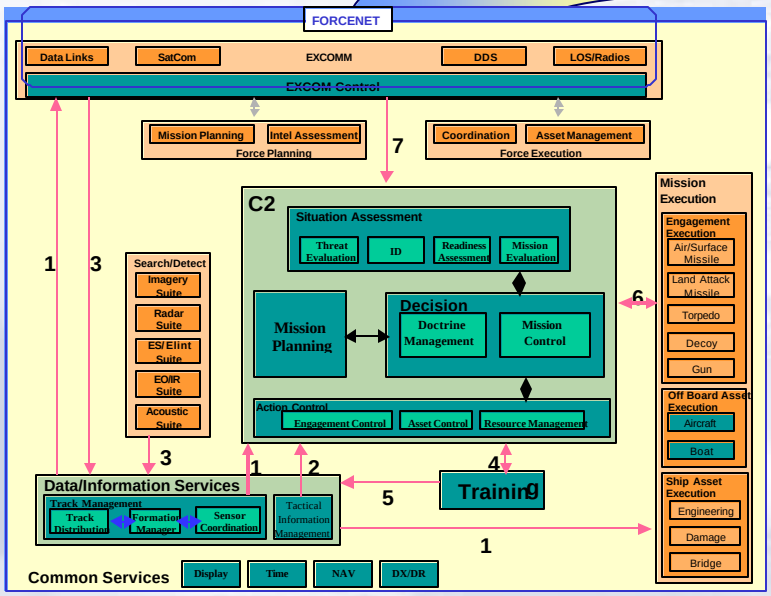
FORCEnet Architecture



Real-Time Domain

OA Functional Architecture

OA Computing Environment



Proposed FY04 Design Guidance Document

- **Relate Functional Architectures**
- **Relate Technical Architecture/OACE**
- **State Compliance Criteria**
- **Serve as Basis for Pilot Implementation and Future Integrated Architecture Document**

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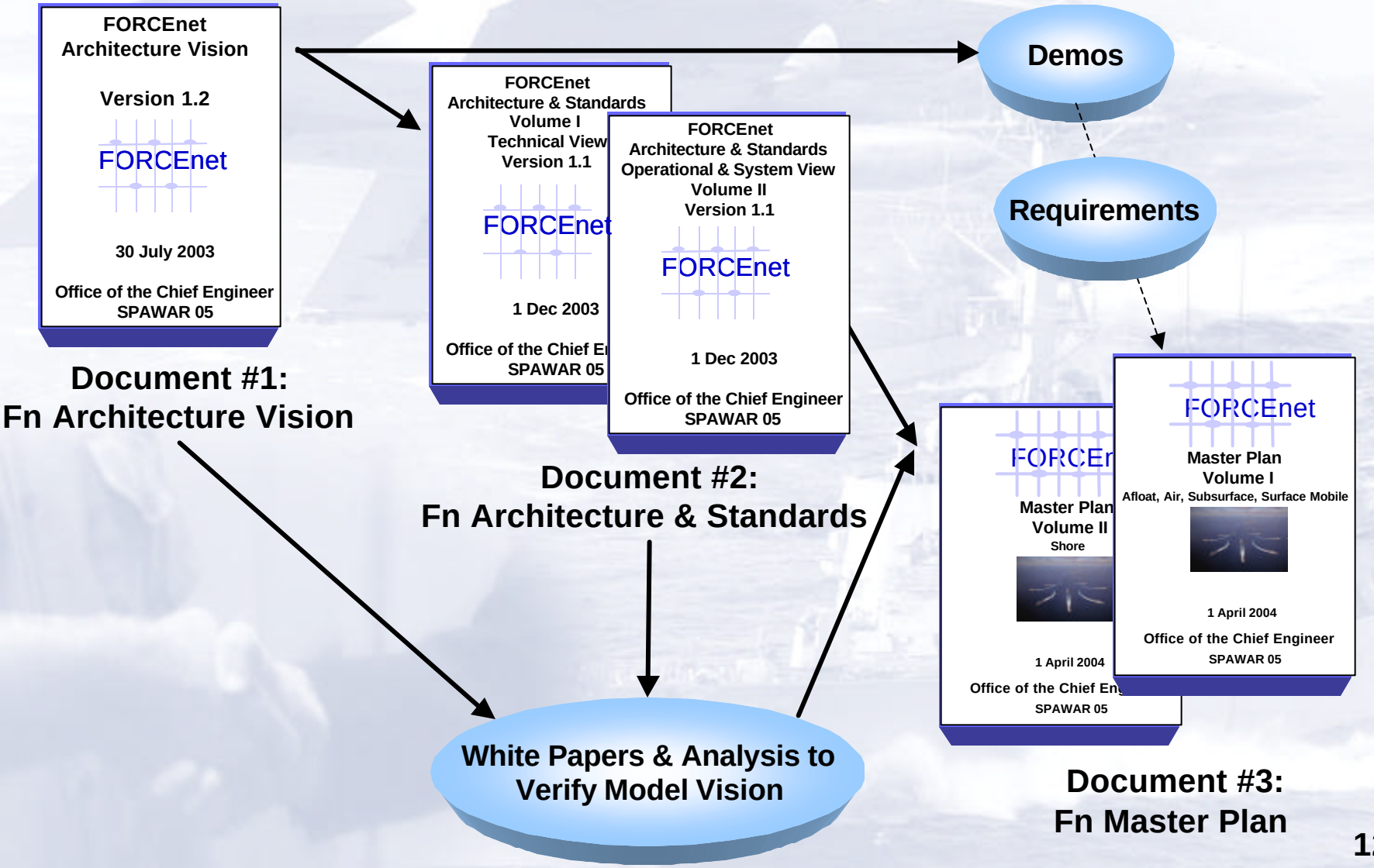
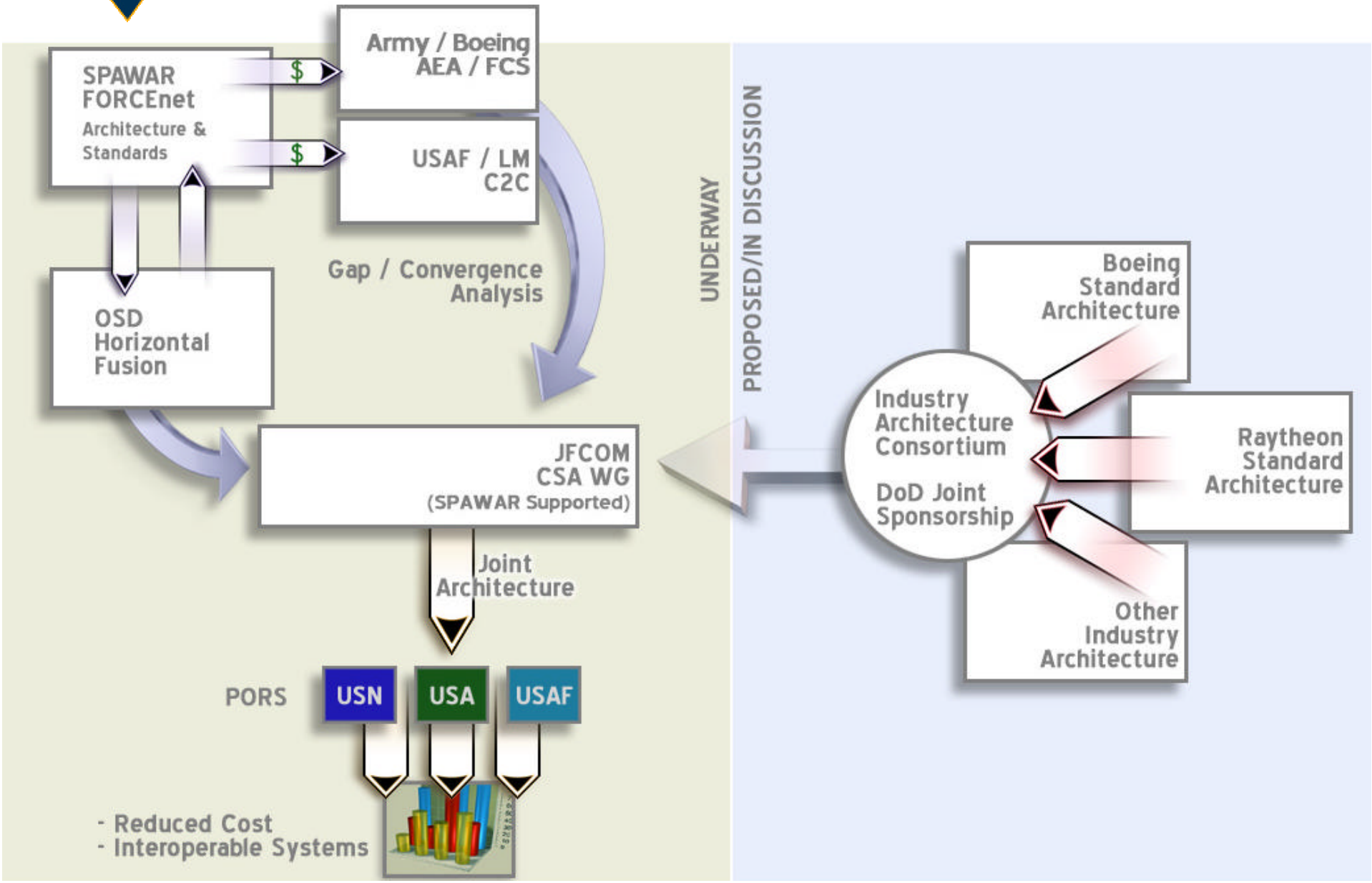
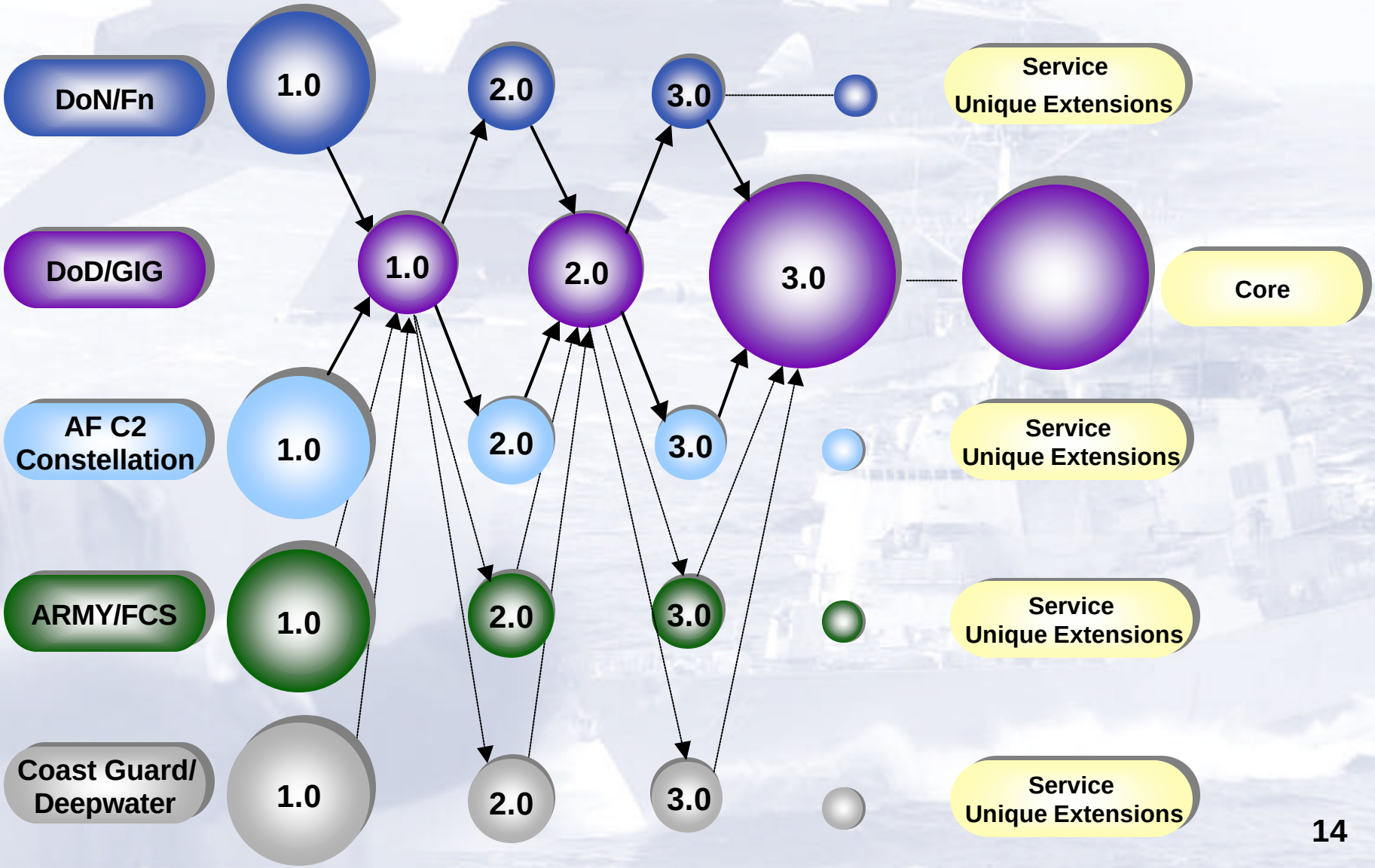
Architecture Products



Joint Architecture & Standards Convergence Initiatives



FORCEnet Convergence with GIG



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Today's Acquisition Challenge

FROM		TO
	SENSE OF URGENCY	
INDEPENDENT PROGRAM FOCUSED SYSTEM ENGINEERING EFFORTS	→	FORCE LEVEL SYSTEM ENGINEERING
INDEPENDENT PROGRAM MANAGEMENT	→	COORDINATED PROGRAM MANAGEMENT
STOVE PIPE PROGRAM DEVELOPMENT	→	MULTI PROGRAM DEVELOPMENT
STAND ALONE PROGRAM TEST & ANALYSIS	→	INTEGRATED TEST & ANALYSIS
AD HOC FLEET INVOLVEMENT	→	INTEGRATED FLEET INVOLVEMENT

Without Abandoning Engineering Rigor

Capability-Based Acquisition

- Elevates systems engineering to the Family of Systems / System of Systems (FoS/SoS) level
- Creates capability-based acquisition portfolios as basis for FoS/SoS system engineering
- Implements Naval Capability Evolution Process with participation from acquisition, resourcing and operational communities
- Assesses progress and risk of delivering capability at portfolio level

Combines Capability Focus of Warfighter with Evolutionary Acquisition in a Netted Systems Environment

Technical Authority (TA)

- **TA Working Group established**
  - **Develop a consistent TA methodology for use by all SYSCOM's**
    - **Single structure for FORCEnet, Combat System, and Air, Land, and Sea Platforms**
  - **Leverage best practices from NAVSEA, NAVAIR, MARCORPSYCOM**
  - **Use technical expertise from all the SYSCOM's**
  - **FORCEnet Architecture and Standards Documentation to serve as the touchstone**
- **Initial FORCEnet TA Guide released May 2004**

Naval Acquisition Community Policy for Implementing FORCEnet Capability

- Acquisition Program Managers shall modify their acquisition strategy to achieve the objective FORCENET capability for Information sharing, Collaboration, Decision making
- Material support and Scientific Research Programs shall develop a FORCEnet implementation plan with the same objective
- Program managers shall facilitate FORCEnet implementation by using:
  - Fn Consolidated Capabilities Checklist (Fn CCC)
  - Fn Implementation Baseline (Fn IBL)
  - Fn Implementation Process

Challenge to Industry

Network Centric Operations Industry Consortium: Vision

"Industry working together with our customers to provide a Network Centric environment where all classes of information systems interoperate by integrating existing and emerging open standards into a common evolving global framework that employs a common set of principles and processes."

A necessary step, but

Must embrace SoS/FoS Systems Engineering Approach:

- **Invest in Collaborative Capabilities**
- **Implement a means of sharing design data**


SPAWAR